## Patent Claims:

## 1 - 7 (canceled)

- 8. (new) A gas turbine combustion chamber, comprising: a manhole to access a combustion chamber interior; a manhole cover to seal the manhole; and an inner cooling chamber arranged within the manhole cover.
- 9. (new) The gas turbine combustion chamber according to Claim 8, wherein a combustion chamber wall has a wall cooling chamber.
- 10. (new) The gas turbine combustion chamber according to Claim 9, wherein the inner cooling chamber of the manhole cover is connected for fluid flow purposes to the wall cooling chamber of the combustion chamber wall.
- 11. (new) The gas turbine combustion chamber according to Claim 10, wherein the inner cooling chamber of the manhole cover is directly connected to the wall cooling chamber of the combustion chamber wall by inserting the manhole cover into the manhole.
- 12. (new) The gas turbine combustion chamber according to Claim 11, wherein a fixing element which supports a cover element of the manhole cover against the combustion chamber interior, and simultaneously holds a liner element adjacent to the manhole cover against the combustion chamber wall.
- 13. (new) The gas turbine combustion chamber according to Claim 12, wherein the cross-section of the fixing element is essentially U-shaped, whereby a first side of the U supports the cover element and a second part of the U holds the liner element.
- 14. (new) The gas turbine combustion chamber according to Claim 13, wherein an element of the fixing element projects into the manhole such that a cover liner of the manhole

cover is supported against the combustion chamber interior, and the manhole cover can be removed from the manhole.